### Approaches to Eliminating Sociocultural Disparities in Health

Carol R. Horowitz, M.D., M.P.H, Margaret H. Davis, M.H.S., Ann-Gel S. Palermo, M.P.H., and Bruce C. Vladeck, Ph.D.

The recent flurry of studies documenting the presence of racial, ethnic, and socioeconomic disparities in health care and health have outpaced articles that describe &c tive strategies to eliminate disparities. Through literature review and informal interviews with research, policy, and program experts, we developed a framework of programs that address disparities though targeting clinicians, patients and communities, and health systems. We found that the lack of technical expertise, esources, and sensitive tools are all common bariers to evaluating programs. To stimulate more effective programs and rigorous evaluations, we describe specialized implementation and evaluation techniques programs can use, and make recommendations for future efforts.

#### INTRODUCTION

Over the past decade, there has been a growing amount of attention focused on demonstrating or documenting the prevalence of racial, ethnic, and socioeconomic disparities in health status, utilization, and outcomes. These sociocultural disparities are most commonly described in groups who have experienced and often continue to experience political, social, and economic

Carol R. Horowitz is with the Departments of Health Policy and Medicine of the Mount Sinai School of Medicine in New York City. Margaret H. Davis, Ann-Gel S. Palermo, and Bruce C. Vladeck are with the Institute for Medicare Practice of the Mount Sinai School of Medicine. Support for this article was provided by the Agency for Healthcare Research and Quality (AHCRQ) under Contract Number 290-95-2000 and by the Henry J. Kaiser Family Foundation. The views expressed in this article are those of the authors and do not necessarily reflect the views of the Mount Sinai Medical Center in New York City and the Health Care Financing Administration (HCFA).

discrimination. These populations have diverse health beliefs and values, differing prevalence of diseases, and may respond differently to therapies (Lavizzo-Mourey and Mackenzie, 1996).

While researchers have made significant advances in assessing sociocultural disparities, they have not made such advances in conducting, evaluating, sustaining, and disseminating programs to address them. They have either been unable to improve many aspects of the health care and the health of diverse populations, or unable to demonstrate and communicate the success of many of their efforts. Research, clinician, policy, and community groups have often failed to work together, though many are currently adopting novel strategies to attack the serious and troubling gap in health outcomes. We will review existing approaches to reducing disparities and barriers to their evaluation. We will then provide recommendations for developing, implementing, and evaluating programs to assess the root causes of, and eliminate, disparities. We gathered this information from a review of published and unpublished documents, and informal interviews with providers, program and policy leaders, and researchers around the United States.

### OVERVIEW OF SELECTED APPROACHES

There are a variety of ways to characterize the many programs that have been implemented to address sociocultural disparities in health status, utilization, and outcomes. For this overview, we have

grouped them into three broad categories: (1) those targeted at health providers, (2) those focused on individual patients and communities, and (3) those that address health systems and policies more broadly. These categories naturally overlap, and many initiatives approach these problems by adopting more than one strategy. In this section, we will outline programs that represent each approach. This does not imply that those interventions have been shown to reduce disparities—the vast majority have not been adequately evaluated for their effects on health.

### Health Provider-Targeted Programs

Until recently, health providers received little formal training on how to deliver culturally and linguistically competent care, and little assistance in working with diverse populations. While many racebased health assumptions have been proven inaccurate, informal advice and myths based on stereotypes may be common in the medical school educational process, and this "silent curriculum" may influence many health care providers (Ricks, 1998). Efforts to help clinicians better understand and improve the care and health of their increasingly diverse patient populations occur in three general areas: (1) formal clinician training; (2) clinician resources such as published literature and internet websites, and (3) partnerships with interpreters.

# Cultural and Linguistic Competency Training

Surveys in the early 1990s showed that very few U.S. medical schools had integrated cultural competency training into their curriculum (Lum and Korenman, 1994). Although more recent surveys indicate that a growing number of schools are

including courses specifically on "multicultural medicine," cultural issues are more often incorporated into general medical coursework. The American Medical Association (AMA) has adopted policies that encourage, but do not require, medical schools to offer electives in culturally competent health care and educational programs about cultural issues (American Medical Association, 1999).

Several professional organizations and medical specialty groups provide cultural competency training to clinicians who have already completed their medical education. These include the AMA, the National Medical Association, the American Academy of Family Physicians, Resources for Cross Cultural Health Care, the Cross Cultural Health Care Program at the Pacific Medical Center, and the National Center for Cultural Competence at Georgetown University. Most programs aim to foster clinicians' competency through promoting respect, understanding, and effective communication with patients (Like, Steiner, and Rubel, 1996; Fortier, Shaw, and Taylor, 1999; Smith, 1998, Svehla and Crosier, 1994). programs also work to enhance organizational competency by seeking community and staff input in service delivery decisions, and collecting demographic data about and hiring staff that reflect the groups they serve (Fortier, Shaw, and Taylor, 1999). They encourage organizations to train all levels of health care personnel (Opening Doors, 1998), and introduce a community to staff in positive and informative ways, such as having students visit the community and present information about the community to clinicians, or provide written information on the beliefs, practices, and histories of the population (Cross Cultural Health Care Project, 1995). They also may work to institutionalize, through explicit management strategies and policies, efforts to discover and address racism and other disparities within organizations.

Associations, organizations, and some Federal and State agencies have independently developed guidelines, programs, or curricula addressing culturally effective care (Like, Steiner, and Rubel, 1996). To date, there are no nationally accepted standards for cultural or linguistic competency in health service delivery. Therefore, there is wide variation both in the scope and quality of these pro-However, the Office of Minority Health in the U.S. Department of Health and Human Services (HHS) recently published their recommendations for national standards (Federal Register 1999b). They are requesting extensive public comment on these recommendations in order to move towards national consensus and broad implementation of standards by providers, policymakers, accrediting agencies and purchasers.

### Other Clinician Resources

Clinicians may take advantage of literature, videos, and websites that contain guidelines for culturally sensitive care, and suggestions for working with specific eth-The Diversity Rx website nic groups. (www.diversityrx.org) offers information about cultural and linguistic competency, policy and legal issues, and provides networking opportunities, technical assistance, consultation services, referrals, and customized informational packets. EthnoMed website (www.healthlinks. washington.edu/clinical /ethnomed) contains medical and cultural information intended to help overcome barriers between providers and refugees living in Seattle, WA. This website is designed as a clinical tool that can be used onsite by health care providers prior to seeing a patient. Clinicians can obtain information about specific ethnic groups and their health beliefs, and download educational materials for patients that are written in patients' native languages.

### Partnerships with Interpreters

Training programs, websites, and written resources may not be able to provide clinicians with adequate information about the beliefs, practices, and languages of the patients they serve. Patients may not mirror the description of their culture in the literature, and training programs may not be able to prepare clinicians for all patient Therefore, many advocate encounters. that clinicians work closely with other professionals who understand their patients. Clinicians encountering patients who speak a different language need to have at least the most basic assistance with language interpretation to ensure effective patient-doctor communication (Woloshin, Schwartz, and Katz, 1997; Baker et al., 1996; Woloshin, et al., 1995; Manson, 1988; Putch, 1985; Marcos, 1979). Professional interpreters rather than ad-hoc interpreters (such as family members, other patients, and semi-fluent staff) will likely protect confidentiality, enhance accuracy, and promote productive dialogue between physicians, patients, and their families. Clinicians may also access interpreters through telephone language banks.

# Patient and Community Targeted Programs

Programs often target individual patients and communities to address differences in cultures, health beliefs, and disease presentations that create conflicts and misunderstandings between medical and patient communities. The decision about whether or how to take action about a health concern is influenced by individuals' backgrounds and beliefs, and their pos-

itive and negative experiences with health care (Taylor, 1998; Galanti, 1991; Higgs and Gustafson, 1985). Programs that target patients or communities can partner with community members to: (1) develop culturally appropriate settings to provide health care; (2) employ community health workers, and (3) conduct broad community-based efforts around health issues.

### **Creating Culturally Appropriate Settings**

The staff at health care sites may redesign settings to look familiar to the communities they serve, educate personnel about patients' cultural beliefs and traditions, translate materials into commonly used languages at appropriate literacy levels, hire staff from the community who represent the groups who frequent the health care setting, and orient patients to the medical space and its personnel (Mattson and Gonzalez-Swafford 1992; Lew, Gutierrez, 1983). The Community Health and Social Services Center in Detroit integrated many of these approaches into their service delivery. Community members worked with the local Department of Health and Social Services to address the lack of health providers and facilities in the predominantly Hispanic southwest section of Detroit by developing a center that provides culturally relevant health care and social services to its residents. employed bilingual, bicultural staff from the community, decorated the waiting room with images from the Latino culture, and produced bilingual clinic signs, written materials, and educational programs (Guzman, 1999).

The Westside Health Authority, a community-based coalition of providers and grassroots organizations in Chicago, employed community members of the population they serve to explore why one-half of all residents were going outside their

own community for health care services. Unemployed black American females were trained to identify barriers to care in health clinics by observing, documenting, and analyzing the behaviors of patients and providers. They discovered that patients found clinic signs ambiguous, felt their confidentiality was violated in public waiting areas, and had difficulty distinguishing between the various jobs of the clinic staff members. As a result, Westside hired community advocates to facilitate communication between patients and staff, redesigned clinic signs, and more clearly identified personnel and their roles. At the end of the project, each of the female observers was able to find employment (Opening Doors, 1998).

### Making Use of Community Health Workers

Both English-speaking and non-Englishspeaking patients may benefit from working with people who can help them understand medical discussions with their providers and navigate complex and often unfamiliar health processes. A common approach to break down cultural barriers in medical care is to make use of community health workers (CHWs), community members who share experiences, language, and a cultural background with patients they serve, and have a solid understanding of their community and its resources (Putsch, 1985; Annie E. Casey Foundation, 1998; Poss and Rangel, 1995; Faust and Drickey, 1986). They are trained in medical interpretation, patient confidentiality, case management, cultural mediation, and community health education and outreach in order to conduct health promotion and education, and instruct people in ways to gain access to services. At an individual level, CHWs are viewed as critical in helping to reduce cultural and linguistic barriers to health care services and information. They also educate providers about the community's health needs, cultural norms, and culturally competent care (Annie E. Casey Foundation, 1998).

In the Community House Calls project at Harborview Medical Center in Seattle, CHWs help Cambodian and East African refugee families negotiate complex and culturally unfamiliar health and social services processes. They used hand-held computers to maintain and access records on the spot, and provide information to the health care team about patients' practices, beliefs, living circumstances, and family issues (Opening Doors, 1998).

# Conducting Broad Community-Based Efforts for Better Outcomes

Improving the health of a community lies beyond the scope of any single profession (Bolton et al., 1998). Many communities are faced with the cumulative effects of low levels of formal education, low income, poor housing conditions, insufficient economic development and limited health resources that represent formidable barriers to the implementation of successful health promotion and health service delivery programs (Jones, 1986). Because these factors are inextricably related to the health of community members, community-targeted programs do not necessarily originate from the health profession, and may improve health by addressing people's economic, spiritual, social, and other non-medical needs. These programs may focus efforts away from deficiencies of communities or particular populations, and toward their strengths and assets, such as strong leadership and economic and social service programs already in operation. The faith-based community, for example, contains a network of people sharing similar concerns, with influence in their communities and an ability to provide educational programming and activities (Teruel and Alleyne, 1998).

The W.K. Kellogg Foundation has supported community-based models that seek to improve the connections between existing services and the elderly (W.K. Kellogg Foundation, 1995). Denakkanaaga, Inc. aims to help frail Native Alaskan elders in 43 interior villages that span a 235,000 square-mile area. Through in-home services, support to family caregivers and village-based adult foster care, this program enables the elders to remain in their villages, close to family and friends, amid familiar surroundings. Elders participate in decisionmaking regarding their care and in evaluating the program's effectiveness (W.K. Kellogg Foundation, 1995). In East Harlem (also known as Spanish Harlem) in New York City, the East Harlem Council for Human Services, a broadbased community coalition, also worked to influence the health of their community. East Harlem's residents established the council to provide social, economic, organizational, and cultural services to the community. With technical assistance from a local academic medical center, the Council founded the Boriken Neighborhood Health Center to improve health services delivery (Deuschle, 1983).

# Health System Policies and Approaches

Federal, State, and local governments, health plans and health systems encourage many efforts to eliminate sociocultural disparities in health through requirements, regulations, standards, and enforcement mechanisms. These include funding of research and demonstrations by health agencies and medical centers, regulation and oversight of Medicare, Medicaid, and managed care plans, and investigation and

enforcement of civil rights laws. Policies may include standards for quality measurement and improvement, data collection, cultural and linguistic competency, and access to care. We highlight three priority initiatives to illustrate these interventions: (1) responses to a Federal initiative to eliminate disparities; (2) managed care regulations and programs; and (3) enforcement of civil rights laws.

### Federal Initiative to Eliminate Disparities

In response to President Clinton's "National Initiative on Race," HHS developed an initiative to eliminate disparities in six areas of health access and outcomes by the year 2010. These areas were chosen because they affect multiple ethnic groups, significant disparities in outcomes have been demonstrated, and reliable national data exist that can track the progress and results of efforts to eliminate disparities (U.S. Department of Health and Human Services, 1998). A major component of this effort is a program administered by the Centers for Disease Control and Prevention (CDC): Racial and Ethnic Approaches to Community Health 2010 (or REACH 2010). This program strives to help communities organize and mobilize resources to reduce disparities in the target areas. Phase I grants support the planning and development of demonstration programs that use a collaborative multiagency and community participation model to identify or develop appropriate data sources, and develop intervention strategies and evaluation measures. Phase II, the CDC intends to select from among the Phase I grantees to fund the implementation and evaluation of selected interventions in collaboration with local, State, and national partners, as well as dissemination and publication of results and lessons learned (Federal Register 1999b).

In response to the HHS initiative, HCFA is requiring each State peer review organization (PRO) to target one of six national clinical conditions or access outcomes for elderly and disabled minority Medicare beneficiaries. They identified one of the PROs as a "Disadvantaged Area Support" PRO (DASPRO), and charged it with supporting the other PROs in collecting data, identifying populations, and designing and evaluating interventions. More recently, AHRQ solicited program project grants to analyze causes of inequalities related to the delivery and practice of health care, and identify and implement strategies to eliminate them. They encourage programs to develop and strengthen the relationship between researchers, community-based organizations, and change agents.

### Managed Care and Cultural Competency

Regulations for managed care plans are addressing how cultural differences affect access to care. In the Medicare+Choice program regulations, HCFA requires that "services are provided in a culturally competent manner to all enrollees, including those with limited English proficiency or reading skills, diverse cultural and ethnic backgrounds, and physical or mental disabilities." (Code of Federal Regulations, 1998a) Medicaid regulations have been more explicit, directing Medicaid managed care organizations to provide interpreter services "when language barriers exist." (Federal Register 1998) More broadly, there is a growing call for managed care organizations to re-examine their systems and reorient their programs to incorporate an understanding of diverse populations (Lavizzo-Mourey and Mackenzie, 1996; Andrulis and Carrier, 1999). These efforts have included developing orientation videos that introduce populations to managed care, establishing community advisory boards, increasing the cultural diversity of suppliers and providers, and supporting multicultural events sponsored by ethnic and special interest groups (Henry Ford Health System, 1996).

In California, some managed care organizations have developed community outreach programs to assist their Medicaid beneficiaries (nearly one-half of whom are Hispanic), in moving from fee-for-service into managed care (Coye and Alvarez, 1999). Kaiser Permanente, for example, organized teams of CHWs headed by a public health nurse to make home visits to Medicaid enrollees in order to conduct assessments, assist families in accessing services, educate them on managed care, and overcome barriers of transportation and language (Coye and Alvarez, 1999).

Monitoring and Enforcement of Civil Rights Laws

Section 601 of Title VI of the Civil Rights Act of 1964 states that "no person in the United States shall on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance" (Code of Federal Regulations, 1998b). These programs include Medicare, Medicaid, and Public Health Service block grants such as Maternal and Child Health grants (Code of Federal Regulations, 1998b). Most of the regulatory and enforcement activity around cultural competency has focused on linguistic access to health care and not broader issues of cultural competency and discrimination. Related court decisions and Department of Justice regulations have mandated federally funded health care providers to offer interpreter services (Hayashi, 1998). The Office of Civil Rights states that health care providers who

receive Federal financial assistance must: have a procedure for identifying the language needs of patients; provide qualified interpreters at no cost and in a timely manner; develop written policies and procedures regarding interpreter services and disseminate them to staff; translate written materials; and conduct cultural sensitivity training programs for staff (Hayashi, 1998; Perkins et al., 1998). Given limited resources and staffing constraints, the agency has functioned mainly on a compliance-driven basis, and the penalties or sanctions for non-compliant providers are not always clear.

#### **EFFECTIVENESS OF PROGRAMS**

Surprisingly few of the ambitious undertakings to reduce sociocultural disparities have been rigorously evaluated. There is little empiric evidence demonstrating which patient outcomes clinician-targeted programs improve, the magnitude of their impact, or how effective they are in improving health without also providing other patient-related services such as community health workers. An interpreter may not benefit a patient if the patient does not have access to the treatments suggested, or if a telephone interpreter is not able to use the patient's body language to see that he or she does not understand or believe what is being said. Similarly, while cultural competency training courses often employ surveys, or pre- and post-tests of clinicians to assess the course's effects on clinician knowledge and attitudes, we found no published reports evaluating whether the patients of trained clinicians experience different outcomes from those of untrained clinicians.

In terms of patient and community targeted programs, most evaluations of CHWs are anecdotal and focused on processes, though there is some evidence

that they also improve short-term outcomes such as increasing the rate of health screening activities by certain populations (Annie E. Casey Foundation, 1998; Hammad, 1999). In fact, the lack of concrete data on their effectiveness has hampered efforts to advocate for these programs (Annie E. Casey Foundation, 1998). Most efforts to develop culturally appropriate settings have used simple process measures, such as the amount of material translated, rather than measuring effects on patient satisfaction, comprehension, health behavior, or health. In our review of health systems interventions, we were able to uncover some, but not many rigorous evaluations of these programs, though Federal initiatives underway appear to be incorporating evaluative components.

# SPECIALIZED IMPLEMENTATION AND EVALUATION TECHNIQUES

There are several steps to consider in organizing and evaluating interventions to decrease sociocultural disparities in health. Many have been well-described in the literature on program development in general (Rossi and Freeman, 1993; Suchman, 1967). However, standard methods of social experimentation are often inadequate or inappropriate for use by programs addressing disparities in health, and many barriers exist to conducting and evaluating these programs. We now describe some of the important aspects of program development and implementation.

### Building Infrastructure for Implementation and Evaluation

A coalition of program personnel, researchers, clinicians, patients, health systems representatives, and relevant community members and leaders can develop practical, feasible, and sustainable pro-

grams that target a population's needs, ensure cultural competency, and evaluate and disseminate findings (W.K. Kellogg Foundation, 1998; Altman, 1995). While communities and health systems often have historical reasons for mistrust and misgivings, both can benefit from envisioning each other as partners with important expertise and resources (W.K. Kellogg Foundation, 1998). Communities are not merely vulnerable, troubled, or diseased populations in need of rescue, and health systems are not merely money-making ventures or research machines insensitive to needs and preferences of patients. On the one hand, researchers and health systems may fall short of serving a target population they do not understand. On the other hand, providers and communities may benefit from the input of researchers and representatives of health organizations, and have a greater chance of sustaining programs when working closely with these potential allies.

Most programs are developed by persons from outside target communities (Oakley, 1989; Orlandi, 1992a). From an outsider's perspective, involvement of community members and leaders is important whether that community is a racial and ethnic minority group whose care one aims to improve, or a cohort of clinicians or health system leaders where fostering cultural competency is the objective. Community involvement can help ensure that project goals are relevant to the population, that the means of accomplishing them is sensible for that group, and that the program considers the knowledge, attitudes, beliefs, and practices of the target group during program development and evaluation, rather than afterward (Lefebvre and Flora, 1988). However, difficulties gaining entry to a community and maintaining its involvement are commonly described barriers to program implementation (Doyle,

Smith, and Hosokawa, 1989). Program leaders should encourage the participation of community members, while acknowledging that these individuals may have limited personal resources or excessive demands on their time (Grace, 1992).

Familiarity with a target population can also uncover important needs or goals the community may have that should be acknowledged, or the population may have little interest in participating. It is critical to be aware that patients may mistrust or have a "healthy paranoia" of researchers and outside organizations, given a history of racism, marginalization of minority communities by health care systems (Grace, 1992; Trotter, 1996), and past experiences of having researchers enter communities or health centers, collect data, and leave without giving feedback or taking any obvious actions based on their findings (Casas and Thompson, 1991).

# Defining and Identifying Aims and Targets

Integral to developing and conducting interventions to decrease disparities is evaluating the presence, magnitude, and possible causes of disparities. Such evaluation will help team members prioritize which disparity to target, persuade external funders and health systems to focus on the problem, and form a basis for program development and evaluation. While classification of persons by racial and ethnic groups is very controversial, programs should understand their target group's size, sociodemographic characteristics, health utilization patterns, cultural beliefs and practices, experiences with racial discrimination, and attitudes toward health care (Krieger, Sidney, and Coakley, 1998; Williams, 1996a; 1996b; Williams Lavizzo-Mourey, and Patcher, 1994). These data may yield new insight on populations, as minority and nonEnglish-speaking patients have been excluded from much research, studied only as part of a larger group such as non-white or Hispanic patients (Trimble, 1996; Gonzalez-Calvo, Gonzalez, and Lorig, 1997; Frayne et al., 1996), or as new immigrants, not yet studied in their new environment. Data collected by Federal, State, and local agencies, and health centers and foundations may undercount or misclassify racial and ethnic groups, and often use broad "ethnic glosses" that overlook potentially large and important differences among ethnic subgroups (Arday et al., 1997; Krasner, 1994; Hahn, 1992; Robinson, 1993; Trimble, 1996).

Qualitative methods may be the most informative way to learn about root causes of disparities, to explore potential means to address them and sensitively evaluate their impact (Bernard, 1994; Devers, Sofaer, and Rundall, 1999; Crabtree and Miller, 1999). Qualitative data can capture information from patients that cannot be gathered through closed-ended surveying, and can bring the study, the target population, and the study's impact to life for outside audiences (W.K. Kellogg Foundation, 1998). Because methods to identify reasons for disparities require detailed analysis, it may be helpful to target disparities whose causes have been assessed, or to allow ample time to develop models to explain disparities before committing to a strategy to address them (Mishra et al., 1998; Vazquez et al.; 1998; Morgan and Levin, 1995).

When conducting surveys, it is crucial not only to translate instruments into the languages predominantly used by the population being studied, but also to develop ways to maximize response rates and cultural appropriateness of questions and response choices. Researchers may translate results from open-ended interviews and focus groups into scales that supplement validated survey questions, and ensure that standardized questions are rel-

evant to a patient population (Gonzalez-Calvo, Gonzalez, and Lorig, 1997; Bindman et al., 1993). Particular attention should be paid to understanding characteristics of the racial or ethnic group targeted. For example, when surveying persons from Spanish-speaking populations, it is important to recognize their heterogeneity and multiple ethnic origins, and to be aware that not all concepts in English have linquistic or cultural equivalents for Hispanic persons. Some research has shown a tendency for certain Spanish-speaking populations to agree with questions ("yea-saying"), and that Spanish language respondents interpret response scales differently than English language respondents (Aday, Chiu, and Andersen, 1980). Others have found little variance in measures for carefully developed instruments (Morales, 1998; Jones and Kay, 1992). Approaches unique to programs addressing cultural barriers to care include measuring cultural competency, acculturation, and cultural identification of patients (Trimble, 1996; Marin et al., 1987; Kim et al., 1996).

Recruitment and enrollment strategies for program participants should display sensitivity to specific patient populations by identifying potential cultural barriers to participation, fostering patient trust in the researchers and patient understanding of the project, ensuring confidentiality, and using surveyors familiar with the culture, or preferably from the culture and community of the patients (Bindman et al., 1993; Millon-Underwood, Sanders, and Davis, 1993; Morales, 1998; Jones, 1986; Swanson and Ward, 1995; Roberson, 1994). Political and economic factors that have impacted populations can influence participants' perceptions of the goals of the intervention and their willingness to participate (Taylor, 1998).

### **Defining Project Goals and Objectives**

It is important to define the health-related outcomes a program aims to improve. While program leaders may be confident they understand how to meet the needs of their patient population, a vague goal to improve health care will be difficult to implement and impossible to evaluate. Goals for programs addressing health disparities can include improved access to care, development of culturally and linguistically appropriate settings and materials, changes in patients' or clinicians' knowledge and attitudes, and increases in relevant community resources or activities (W.K. Kellogg Foundation, 1998; Cohen, Stunkard, and Felix, 1986; Helitzer et al., 1999). These goals, while important, may improve without effecting any improvement in patients' health outcomes (Fleming and De Mets, 1996). Are hiring a bicultural health worker, translating signs into another language, and holding a meeting with community members sufficient, or should programs also demonstrate improvements in health status? Program models that delineate and link outcomes with processes or activities, and with their underlying principles, may be able to transform vague notions of success into specific outcomes that can be measured (W.K. Kellogg Foundation, 1998). For example, a program that aims to address utilization of health services can employ a model to clarify whether a successful program would increase utilization as a marker of improved access to and accessibility of care, or decrease utilization as a sign of improving health status (Doyle, Smith, and Hosokawa, 1989).

### BARRIERS TO EVALUATION

In exploring why we found few rigorous evaluations of programs, we uncovered four barriers to evaluation: (1) lack of appreciation of the importance of evaluation; (2) lack of technical expertise; (3) lack of resources; and (4) lack of sensitive tools for evaluation, including reliable data on race and ethnicity. Many of these were captured in a survey of staff and coalition members from nine community health promotion projects targeting non-white and rural poor populations (Altman, 1995). Commonly reported obstacles to meeting their goals and future objectives included lack of funding, little input by coalition and community members, and lack of specific and achievable goals and objectives. Addressing these obstacles and developing an effective evaluation strategy were commonly cited future goals.

### Lack of Appreciation for Importance of Evaluation

Program administrators may not understand the purpose of, or believe in the importance of evaluation, or may not have been provided the tools or opportunities to understand its benefits. Some have blind faith that elements of programs, such as translating a patient handout into another language, must be effective. People who deliver care may disagree with funders and evaluators about what tools and methods are credible and reliable for evaluation.

### Lack of Technical Expertise

Program development and evaluation require both evaluative and cultural competency (Annie E. Casey Foundation, 1998). While most programs have cultur-

ally competent or bicultural staff, they lack the technical expertise for evaluation (Orlandi, 1992). Some have evaluative capacity but are unfamiliar with the cultural nuances of the patient population, or face conflicts in objectives and approaches between providers and researchers (Altman, 1995). If evaluation is not conducted with the target groups' participation and permission, there may be tension and poor communication, which would have a negative impact on the patients, the program, and its evaluation (Grace, 1992). Even with technical expertise, it may be difficult to delineate outcomes that can be measured. Because there is a greater acceptance of quantitative over qualitative evaluation, teams may need to choose between evaluating what is easily quantifiable and measurable (which may not encompass the true objectives), or using qualitative data, which are not considered legitimate in many health publications.

Finally, because the focus on decreasing disparities is relatively new, there are many researchers and policy groups working independently to develop standards for care and tools for evaluation. Without uniformity in goals and objectives between these groups, program personnel may have difficulty determining which strategy they should adopt. For example, if a group aims to assess the impact of trained interpreters on patient satisfaction, they will need to decide which type of interpreters to use, which standard to use to define adequate training, and which tools to use to measure patient satisfaction. If there were uniform standards, personnel could be more confident that their approach was based on expert consensus, and that if they improved care, they would be using an approach that had the support of research and policy communities.

### Lack of Resources

Program managers may be hesitant to divert limited funds and staff time that could be used to serve more patients, just to evaluate a program whose effectiveness seems obvious (Annie E. Casey Foundation, 1998). They may be overwhelmed by the challenges of keeping programs funded and functioning and therefore, unable to look toward evaluation. In general, programs may not have the budget for training evaluators, developing data collection capacities, collecting and analyzing data, or hiring consultants.

### Lack of Sensitive Tools for Evaluation

Even if groups have been able to define outcomes and have resources to evaluate programs, measurement of outcomes across diverse populations can be challenging. There are few existing tools that sensitively assess the effects of interventions. Researchers lack accurate sociodemographic data for specific ethnic and racial groups, and survey instruments that are linguistically and culturally adequate. Many concepts relating to health services for diverse populations, such as cultural competence, are difficult to measure because there is no agreement on their definition (Resnicow et al., 1999). Researchers should field-test evaluation tools in order to select the appropriate environment, language, and content, and help ensure that evaluators are trained, understand the importance of the study, and carry out the evaluation in an appropriate manner. However, these steps require time and resources many programs lack.

#### Dissemination

The majority of interventions that aim to reduce sociocultural disparities remain unpublished. Most approaches to develop-

ing, conducting, and evaluating programs remain the purview of those who implement them. Dissemination of effective strategies may increase local and distant support to sustain projects, enhance their credibility, allow for others to adopt successful strategies, and shape policy (W.K. Kellogg Foundation, 1998). A coalition of health and community advisors can facilitate effective dissemination by reviewing the findings, interpreting them in light of their knowledge of the population, and determining appropriate channels for dissemination to these audiences (Grace, 1992; Trotter, 1996). Regular feedback of project information to the community in a user-friendly way may help decrease mistrust in research and researchers, and help researchers solidify relationships with communities for the future.

# RECOMMENDATIONS FOR FUTURE EFFORTS

There are several areas we recommend focusing program development and evaluation efforts in the future.

# Target Specific Areas for Further Research

- Support efforts to assess the utility of widely used, but poorly evaluated programs, such as interpreter services, cultural competency training, and community health worker programs, so health organizations and policymakers can make informed decisions about resource allocation to work towards eliminating disparities.
- Support collaborations between researchers, policymakers, clinicians, and communities that enhance their ability to conduct and evaluate interventions to eliminate disparities in health. This would include developing definitions of

- and standards for culturally and linguistically competent care. Groups should also develop multi-method, culturally appropriate tools to assess the causes and magnitudes of disparities, and the effectiveness of programs.
- Develop quality indicators that health delivery systems can use to evaluate their existing services. Consider working with organizations and data sets they administer, such as the National Center for Quality Assurance and their Health Plan Employer Data and Information Set. In keeping with Institute of Medicine recommendations, improve and standardize measurements of community health status that can be used by communities and program personnel to assess and compare communities (Pilkington et al., 1999). Develop similarly rigorous standards for cultural competence for managed health care plans (Lavizzo-Mourey and Mackenzie, 1996).

# Maximize Effective Program Development and Evaluation

- Provide technical assistance to program personnel beginning at the proposal-writing stage and continuing through evaluation and dissemination.
- Encourage networking and sharing of solutions among the many groups working in this area in order to minimize "reinventing the wheel," and maximize the benefits and the impact of successful programs. Encourage collaborations to pool or share data, strategies, and resources (Opening Doors, 1998; Kim et al., 1996).
- Require evaluation, with clear objectives and outcomes delineated by a program model (Annie E. Casey Foundation, 1998). It is better to have meaningful outcomes that are difficult to measure, than

- easily measurable outcomes that are not related to the core of a program (W.K. Kellogg Foundation, 1998). Make sure evaluation links persons with cultural competence and evaluative competence to the program. Sponsor evaluation training for project staff to increase the number of individuals who are competent in both areas (Annie E. Casey Foundation, 1998; Orlandi, 1992; Gomez, Hernandez, and Faigeles, 1999; Havelock, 1971).
- · Link service delivery, research, and community leadership and development tightly. Pure research is minimally motivating, and particularly threatening to populations that have been exploited in the past. Require active community participation. If the funding source and directives are completely external to the target group, the external agency takes on a parental quality, which may undermine any perception of the program's support for the group, and minimize participation. Assessing what patients and clinicians need and want before designing interventions will maximize the potential success of programs (Grace, 1992; Trotter, 1996).
- Encourage collection of data on subgroups within broad racial and ethnic categories (Orlandi, 1992b). This may demonstrate important differences in needs, approaches, and outcomes. However, researchers should avoid using data to re-stereotype patients into smaller groups, and encourage providers to approach each patient individually.
- Support innovative program evaluation for hard-to-quantify objectives (Annie E. Casey Foundation, 1998). Foster research to address complex and controversial issues such as experiences of and responses to racism in health care (Krieger, Sidney, and Coakley, 1998;

Williams, 1996a). Encourage programs to pilot innovative strategies and evaluation tools before rolling them out to larger populations.

- Help communities and health organizations gain support and resources to continue successful programs beyond their current grant cycle.
- Encourage basic patient and community-centered medicine. The focus of programs must be on patients: ascertaining patients' needs and preferences, reaffirming patient care as the primary goal of health systems, and soliciting patients' feedback about programs. If providers and program developers begin from a position of respect and empathy for their patients, and an earnest desire to understand the people who come to them for advice and relief, they will have taken a big step toward reducing barriers to care.

#### CONCLUSION

Clearly, more research is needed to assess the effectiveness of widely used interventions to decrease sociocultural disparities in health. These efforts should be a crucial component of our commitment to equality, and to ensuring that all individuals have a better opportunity to live healthier lives. In a radio address on February 21, 1998, announcing his Administration's commitment to eliminating racial and ethnic disparities in health. President Clinton commented both on the complexity of the issue and the imperative that we must now face as a Nation: "We do not know all the reasons for these disturbing gaps. Perhaps inadequate education, disproportionate poverty, discrimination in the delivery of health services, and cultural differences are all contributing factors. But we do know this: no matter what the reason,

racial and ethnic disparities in health are unacceptable in a country that values equality and equal opportunity for all. And that is why we must act now with a comprehensive initiative that focuses on health care and prevention for racial and ethnic minorities."

As researchers and policymakers, we must actively pursue the development of novel strategies. We must develop standards for measurement and quality care across racial, ethnic, and social groups. Finally, it is important to identify and accept the use of non-traditional methods of evaluation, and foster collaboration between and among program administrators, researchers, policymakers, clinicians, and community members and leaders in order to eliminate disparities in health.

### **ACKNOWLEDGMENTS**

The authors would like to acknowledge the thoughtful input of: Joseph Betancourt (Cornell Medical Center), Andrea Jones Blackford (Opening Doors), David Carlisle (University of California at Los Angeles), Mark Chassin (Mount Sinai School of Medicine, National Committee for Quality Assurance), Barbara Cooper (Institute for Medicare Practice), Julia Puebla Fortier (Resources for Cross Cultural Health Care), Irving Goldzweig (DASPRO), J. Ricardo Guzman (Community Health and Social Services Center, Inc.), Adnan Hammad (Arab Community Center for Economic and Social Services), Tom Hertz (HHS), J. Carey Jackson (University of Washington), Wilma Johnson (CDC), Robert Like (University of Medicine and Dentistry of New Jersey), Suzanne Randolph (University of Maryland), Thomas Perez (HHS Office of Civil Rights), and Helen Smits (Wagner School/New York University).

### **REFERENCES**

Aday, L.A., Chiu, G.Y., and Andersen, R.: Methodological Issues in Health Care Surveys of the Spanish Heritage Population. American Journal of Public Health 70(4):367-374, 1980.

Altman, D.: Sustaining Interventions in Community Systems: On the Relationship Between Researchers and Communities. **Health Psychology** 4(6):526-536, 1995.

American Medical Association: Cultural Competence CompendiumChicago. 1999.

Andrulis, D., and Carrier, B.: Managed Care in the Inner City. San Francisco. Jossey-Bass Publishers, 1999.

Annie E. Casey Foundation and the University of Arizona: A Final Report of the National Community Health Advisor Study. Baltimore. 1998.

Arday, D.R., Arday, S.L., Bolen, J., et al.: Behavioral Risk Factor Surveillance of Aged Medicare Beneficiaries. **Health Care Financing Review** 18 (4):105-123, 1997

Baker, D.W., Parker, R.M., Williams, M.V., et al.: Use and Effectiveness of Interpreters in an Emergency Department. Journal of the American Medical Association 275(10):783-788, 1996.

Bernard, H.R.: Research Methods in Anthropology. In: Hunter JL, ed. Qualitative and Quantitative Approaches. 2 Ed: Sage Publications, Inc., 1-585:1994.

Bindman, A.B., Grumbach, K., Keane, D., et al.: Collecting Data to Evaluate the Effect of Health Policies on Vulnerable Populations. Family Medicine 25(2):114-119, 1993.

Bolton, L.B., Georges, A.C., Hunter, V., et al.: Community Health Collaboration Models for the 21st Century. Nursing Administration Quarterly 22(3):6-17, 1998.

Casas, J.M., and Thompson, C.: A Racial/Ethnic Minority Research Perspective. Counseling and Values 35(1):186-195, 1991.

Code of Federal Regulations: Access to Services. Title 42-Public Health, Vol.2, Part 422.112 (a) (2) (vii). Office of the Federal Register, National Archives and Records Administration. Washington, DC. U.S. Government Printing Office, (Revised) October 1,1998a.

Code of Federal Regulations: Nondiscrimination under programs receiving Federal assistance through the Department of Health and Human Services effectuation of Title VI of the Civil Rights Act of 1964. Title 45-Public Welfare, Vol. 1, Part 80, 80.6-80.10. Office of the Federal Register, National Archives and Records Administration. Washington, DC. U.S. Government Printing Office, (Revised) October 1, 1998b.

Cohen, R.Y., Stunkard, A., and Felix, M.R.: Measuring Community Change in Disease Prevention and Health Promotion. **Preventive Medicine** 15:411-421, 1986.

Coye, M., and Alvarez, D.: Medicaid Managed Care and Cultural Diversity in California. New York. The Lewin Group and The Commonwealth Fund, March 1999.

Crabtree B.F., and Miller, W.L.: Doing Qualitative Research. Thousand Oaks, CA. Sage Publications, 1999.

Cross Cultural Health Care Project: Voices of the Communities: A Survey of Health Care Experiences of 22 Medically Underserved Communities in the Seattle Area. Seattle. 1995.

Deuschle, K.W.: Community Oriented Primary Care: Lessons Learned in Three Decades. Community Oriented Primary Care--New Directions for Health Services Delivery Washington, DC. National Academy Press, 6-20, 1983.

Devers, K.J., Sofaer, S.S., and Rundall, T.: Qualitative Methods in Health Services Research Health Services Research 34(5) Part II, 1999.

Doyle, E., Smith, C.A., and Hosokawa, M.C.: A Process Evaluation of a Community-Based Health Promotion Program for a Minority Target Population. Health Education 20(5):61-64, 1989.

Faust, S., and Drickey, R.: Working with Interpreters. Journal of Family Practice 22(2):131-138, 1986.

Federal Register, Medicaid Program-Medicaid Managed Care. Vol. 63, No. 52-021,045, 13111-13328. Office of the Federal Register, National Archives and Records Administration. Washington, DC. U.S. Government Printing Office, March 18, 1998.

Federal Register:Racial and Ethnic Approaches to Community Health 2010; (REACH 2010) Demonstration Projects; Notice of Availability of Funds. Vol. 64, No. 95, 26977-26981. Office of the Federal Register, National Archives and Records Administration. Washington, DC. U.S. Government Printing Office, May 18, 1999a.

Federal Register: Call for Comments on Draft Standards on Culturally and Linguistically Appropriate Health Care and Announcement of Regional Informational Meetings on Draft Standards. Vol. 64, No. 240, 700042-700044. Office of the Federal Register, National Archives and Records Administration. Washington, DC. U.S. Government Printing Office, December 15, 1999b.

Fleming, T.R., and De Mets, D.L.: Surrogate End Points in Clinical Trials: Are We Being Misled? Annals of Internal Medicine 125(7):605-613, 1996.

Fortier, J.P., and Shaw, Taylor Y.: Cultural and Linguistic Competence Standards and Research Agenda Project Part One: Recommendations for National Standards. Resources for Cross Cultural Health Care and the Center for the Advancement of Health, 1999.

Frayne, S.M., Burns, R.B., Hardt, E.J., et al.: The Exclusion of Non-English-Speaking Persons from Research. Journal of General Internal Medicine 11(1):39-43, 1996.

Galanti, G.: Caring for Patients from Different Cultures: Case Studies from American Hospitals. Philadelphia. University of Pennsylvania Press, 1991.

Gomez, C.A., Hernandez, M., and Faigeles, B.: Sex in the New World: An Empowerment Model for HIV Prevention in Latina Immigrant Women. Health Education and Behavior 26(2):200-212, 1999.

Gonzalez-Calvo, J., Gonzalez, V.M., and Lorig, K.: Cultural Diversity Issues in the Development of Valid and Reliable Measures of Health Status. Arthritis Care Research10(6):448-456, 1997.

Gonzalez-Swafford, M.J., and Gutierrez, M.G.: Ethno-Medical Beliefs and Practices of Mexican-Americans. Nurse Practitioner 8(10):29-30, 32, 34, 1983

Grace, C.A.: Practical Considerations for Program Professionals and Evaluators Working with African-American Communities. In Orlandi, M.A., ed.: OSAP Cultural Competence Series 1. Washington, DC. U.S. Department of Health and Human Services, 1992.

Guzman, J.R.: Community Health and Social Services Center, Inc. Personal communication. 1999.

Hahn, R.A.: The State of Federal Health Statistics on Racial and Ethnic Groups. Journal of the American Medical Association267(2):268-270, 1992.

Hammad, A.: Arab Community Center for Economic and Social Services. Personal communication. 1999.

Havelock, R.: Planning for Innovation Through Dissemination and Utilization of Knowledge. Ann Arbor, Michigan. University of Michigan, Institute for Social Research, 1971.

Hayashi, D.: Guidance Memorandum: Title IV Prohibition Against National Origin Discrimination—
-Persons with Limited-English Policiency.
Department of Health and Human Services, Office of Civil Rights. Washington, DC., 1998.

Helitzer, D.L., Davis, S.M., Gittelsohn, J., et al: Process Evaluation in a Multisite, Primary Obesity-Prevention Trial in American Indian Schoolchildren 1-3. American Journal of Clinical Nursing 69(4) suppl. S:816s-824s, 1999.

Henry Ford Health System: Diversity Leap Strategy, Planning Resource Guide. Detroit. 1996-1997

Higgs, Z.R., and Gustafson, D.G.: Community as Client: Assessment and Diagnosis Philadelphia. 1985.

Jones, E., and Kay, M.: Instrumentation in Cross-Cultural Research. Nursing Research41(3):186-188, 1992.

Jones, E.I.: Preventing Disease and Promoting Health in the Minority Community. Journal of the National Medical Association 78(1):18-20, 1986.

Kim, S., Kibel, B., Williams, C., et al.: Evaluating the Success of Community-Based Substance Abuse Prevention Efforts: Blending Old and New Approaches and Methods. Cultural Competence Series, 6 ed. Rockville, MD. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 1996.

Krasner, M.: New York City Community Health Atlas. New York City. United Hospital Fund, 1994.

Krieger, N., Sidney, S, and Coakley, E.: Racial Discrimination and Skin Color in the Cardia Study: Implications for Public Health Research. American Journal of Public Health88(9):1308-1313, 1998.

Lavizzo-Mourey, R., and Mackenzie, E.R.: Cultural Competence: Essential Measurements of Quality for Managed Care Organizations. Annals of Internal Medicine 124(10):919-921, 1996.

Lefebvre, C.R., and Flora J.A.: Social Marketing and Public Health Intervention. **Health Education** Quarterly 15(3):219-315, 1988.

- Like, R.C., Steiner, R.P., and Rubel A.J.: Recommended Core Curriculum Guidelines on Culturally Sensitive and Competent Health Care. Family Medicine 28(4):291-297, 1996.
- Lum, C.K., and Korenman, S.G.: Cultural-Sensitivity Training in U.S. Medical Schools. Academic Medicine69(3):239-241, 1994.
- Manson, A.: Language Concordance as a Determinant of Patient Compliance and Emergency Room Use in Patients with Asthma. Medical Care 26(12):1119-1128, 1988.
- Marcos, L.R.: Effects of Interpreters on the Evaluation of Psychopathology in Non-English-Speaking Patients. American Journal of Psychiatry 136(2):171-174, 1979.
- Marin, G., Sabogal, F., VanOss-Marin, B., et al.: Development of a Short Acculturation Scale for Hispanics. **Hispanic Journal of Behavioral Sciences** 9(2):183-205, 1987.
- Mattson, S., and Lew L.: Culturally Sensitive Prenatal Care for Southeast Asians. Journal of Obstetrics, Gynecology and Neonatal Nursing 21(1):48-54, 1992.
- Millon-Underwood, S., Sanders, E., and Davis, M.: Determinants of Participation in State-of-the-Art Cancer Prevention, Early Detection/Screening, and Treatment Trials Among African-Americans. Cancer Nursing 16(1):25-33, 1993.
- Mishra, S.I., Chavez, L.R., Magana, J.R., et al.: Improving Breast Cancer Control Among Latinas: Evaluation of a Theory-Based Educational Program. Health Education and Behavior 25(5):653-670, 1998.
- Morales, L.: Measurement Invariance of Satisfaction with Care Ratings Among Spanish and English Language Respondents. Journal of General Internal Medicine 13, suppl:113, 1998.
- Morgan, C., and Levin, G.: A Cancer-Prevention Intervention Disadvantaged Women: Design and Implementation. Journal of Cancer Education 10(3):168-175,1995.
- Oakley, P.: Community Involvement in Health Development: An Examination of the Critical Issues. Geneva. World Health Organization, 1989.
- Opening Doors: Reducing Sociocultural Barriers to Health Care. Lessons Learned Washington, DC. 1998.
- Orlandi, M.A.: The Challenge of Evaluating Community-Based Prevention Programs: A Cross-Cultural Perspective. In Orlandi, M.A., ed.: Cultural Competence for Evaluators: A Guide for Alcohol and Other Drug Abuse Prevention Practitioner Working with Ethnical Communities Washington, DC. U.S Department of Health and Human Services, 1992a.

- Orlandi, M.A.: Defining Cultural Competence: An Organizing Framework. In Orlandi, M.A., ed.: Cultural Competence for Evaluators: A Guide for Alcohol and Other Drug Abuse Pervention Practitioners Working with Ethnic/Racial Communities Washington, DC. U.S. Department of Health and Human Services, 1992b.
- Pachter, L.M.: Culture and Clinical Care: Folk Illness Beliefs and Behaviors and Their Implications for Health Care Delivery. Journal of the American Medical Association 271(9):690-694, 1994.
- Perkins, J., Simon, H., Cheng, F., et al.: Ensuring Linguistic Access in Health Care Settings: Legal Rights and Responsibilities. Menlo Park, NJ. The Henry J. Kaiser Family Foundation. National Health Law Program, 1998.
- Pilkington, W.F., Durch, J.S., Bailey, L.A., et al.: Improving Health in the Community. Politics and Life Science, 18(1):157-159, March 1999.
- Poss, J.E., and Rangel, R.: Working Effectively with Interpreters in the Primary Care Setting. Nurse Practitioner 20(12):43-47, 1995.
- Putsch, R.W.: Cross-Cultural Communication: The Special Case of Interpreters in Health Care. Journal of the American Medical Association254(23):3344-3348, 1985.
- Resnicow, K, Baranowski, T, Ahluwalia, J.S., et al.: Cultural Sensitivity in Public Health: Defined and Demystified. Ethnicity and Disease9(1):10-21, 1999.
- Ricks, D.: The Health Divide Series: Medical Myths (Part 8 of 8). Newsday December 7th, 1998.
- Roberson, N.L.: Clinical Trial Participation. Viewpoints from Racial/Ethnic Groups. Cancer 74(9 Suppl):2687-2691, November 1, 1994.
- Robinson, J.G.: Estimation of Population Coverage in the 1990 United States Census Based on Demographic Analysis. Journal of the American Statistical Association 88(423):1047-1057, September 1993.
- Rossi, P.H., and Freeman, H.E.: Evaluation: A Systematic Approach. New York. SAGE Publications, Inc., 1993.
- Smith, L.S.: Trends in Multiculturalism in Health Care. Hospital Material Management Quarterly 20(1):61-69, 1998.
- Suchman, E.A.: Evaluative Research New York. Russell Sage Foundation, 1967.
- Swanson, G.M., and Ward, A.J.: Recruiting Minorities into Clinical Trials: Toward a Participant-Friendly System. Journal of the National Cancer Institute 87(23):1747-59, December 6, 1995.

Taylor, C.L.: The Health Divide Series: Mistakes in the Past, Fears in the Present (Part 6 of 8). Newsday November, 1998.

Teruel, J.R., and Alleyne, G.A.O.: Health and Religious Institutions: Pan-American Health Organization. Washington, DC. Christian Connections for International Health Forum, March 1997.

Trimble, J.E.: Acculturation, Ethnic Identification, and the Evaluation Process. In Bayer, A., Brisbane, F.L., Ramirez, A., et al. 6 ed.: Advanced Methodological Issues in Culturally Competent Evaluation for Substance Abuse Prevention. Cultural Competence Series. Washington, DC. U.S. Department of Health and Human Services, 1996.

Trotter, R.T.: Communication and Community Participation in Program Evaluation Processes. In Bayer, A., Brisbane, F.L., Ramirez, A., et al.: Advanced Methodological Issues in Culturally Competent Evaluation for Substance Abuse Prevention. Cultural Competence Series. 6 ed. Washington, DC. U.S. Department of Health and Human Services, 1996.

U.S. Department of Health and Human Services, Office of Substance Abuse Policy: Cultural Competence Series 6 ed. Washington, DC. U.S. Government Printing Office, 1996.

U.S. Department of Health and Human Services: Initiative Overview: Eliminating Racial and Ethnic Disparities in Health. Washington, DC. U.S. Government Printing Office, 1998.

Vazquez, I.M., Millen, B., Levenson, S.M., and Chipkin, S.: Buena Alimentacion, Buena Salud: A Preventive Nutrition Intervention in Caribbean Latinos with Type 2 Diabetes. The Science of Health Promotions13(2):116-119, 1998.

W.K. Kellogg Foundation: Timely Opportunities: What Works in Community Care for the Elderly Battle Creek, MI, 1995.

W.K. Kellogg Foundation: W.K. Kellogg Foundation Evaluation Handbook. Battle Creek, MI, 1998.

Williams, D.R.: Racism and Health: A Research Agenda. Ethnicity and Disease6(1-2):1-8, 1996a.

Williams, D.R., and Lavizzo-Mourey, R.: The Concept of Race and Health Status in America. Public Health Reports109(1):26-41, 1994.

Williams, D.R.: Race/Ethnicity and Socioeconomic Status: Measurement and Methodological Issues. International Journal of Health Services 26(3):483-505, 1996b.

Woloshin, S., Bickell N.A., Schwartz L.M, et al.: Language Barriers in Medicine in the United States. Journal of the American Medical Association 273(9):724-728, 1995.

Woloshin, S., Schwartz L., and Katz, S.J.: Is Language a Barrier to the Use of Preventative Services? Journal of General Internal Medicine 12(8):472-477, 1997.

Reprint Requests: Carol R. Horowitz, M.D., M.P.H., Mount Sinai School of Medicine, Box 1077, One Gustave L. Levy Place, New York City, NY 10029. E-mail: Carol.Horowitz@mountsinai.org